গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

নং-৩৬.০৮.০০০০.২০০.১৬.০০১.২২.৩৭০ তারিখঃ ৯/৩/২০২৬ খ্রি.

বিষয়ঃ দাখিলকৃত পেটেন্ট আবেদনসমূহ ওয়েবসাইটে প্রকাশ।

বাংলাদেশ পেটেন্ট আইন, ২০২৩ এর ধারা ১৭(৪) অনুযায়ী ডিপিডিটিতে ২০২৪ সালের পেটেন্ট আবেদন নং ৩০৬, ৩৪৩, ৩৫৮, ৩৫৯; ২০২৫ সালের পেটেন্ট আবেদন নং ৩১, ৪১-৪৬, ৫৩, ১২০-১২২, ২৪৮, ২৭৫, ২৯২, ৩১৯, ৩২১-৩২৩, ৩৩৩-৩৩৫, ৩৩৯-৩৫০, ৪০৪-৪১০ ও ২০২৬ সালের পেটেন্ট আবেদন নং ৩, ৭, ৯, ১১, ১৩-১৫, ২২, ৩২, ৩৮, ৪০, ৪২, ৫১, ৬৩ — সর্বমোট ৫৮ (আটান্ন) টি আবেদন নিম্নবর্ণিত তথ্যাদি সহ অধিদপ্তরের ওয়েবসাইটে (www.dpdt.gov.bd) প্রকাশ করা হল।

(ক) উদ্ভাবনের শিরোনাম;
(খ) পেটেন্ট আবেদনকারী ও উদ্ভাবকের নাম;
(গ) আবেদন দাখিলের তারিখ ও নম্বর;
(ঘ) অগ্রাধিকার নম্বর ও তারিখ, যদি থাকে;
(ঙ) পেটেন্ট এর শ্রেণিবিন্যাস;
(চ) উদ্ভাবনের মূল উপাদান চিত্রায়িত করে এইরূপ অংকন, যদি থাকে;
(ছ) বিষয়বস্তুর সার-সংক্ষেপ।

সংযুক্তিঃ ৫৮ (আটান্ন) পাতা।

০৯/০৩/২৬
মোঃ হাবিবুর রহমান
উপ-পরিচালক (পেটেন্ট)

অনুলিপিঃ
১। পরিচালক (সকল), পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর, ঢাকা।
২। সিস্টেম এনালিস্ট, পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর। (ওয়েবসাইটে প্রকাশের জন্য)
৩। উপ-পরিচালক (পেটেন্ট) (সকল), পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর, ঢাকা।
৪। মহাপরিচালক মহোদয়ের ব্যক্তিগত সহকারী, পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর, ঢাকা।

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-306
(22) Filed: 17/10/2024

(23) Priority Data:
China, Number :2023113518573, Date : 18-10-2023.

(71) Applicant: Xiamen Hongfa Electric Power Controls Co., Ltd. of No. 93 Yinong Road, Haicang District, Xiamen, Fujian 361027, Nationality -China

(72) Inventors:

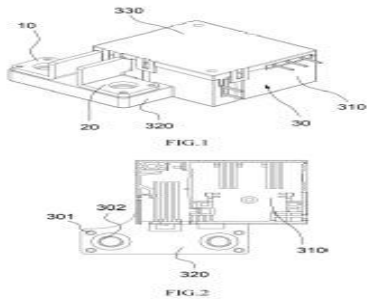
(74) Agent : Doulah & Doulah, {app_representative_address}, Bangladesh

(51) INT. CL. : B23K 26/035

(54) Invention Title: SWITCHING APPLIANCE

(57) Abstract

The present disclosure provides a switching appliance, including a housing; at least one lead-out piece, each having a lead-out terminal; and a locking mounting platform, attached to the housing, enabling at least a partial surface of the lead-out terminal of one of the at least one lead-out piece to be mounted against the locking mounting platform, so that the lead-out terminal to be stably locked to the locking mounting platform together with a conductive connector by support of the locking mounting platform. By providing the locking mounting platform, after the lead-out terminal is locked and fitted with the housing, the housing as a whole withstands most of the twisting force and withstands the pulling force of the wire during installation. As a result, the tensile strength of the lead-out terminal during locking is greatly enhanced, completely avoiding the function failure of the equipment caused by breakage and fall-off of the lead-out terminal and the housing due to the pulling by the uncontrollable external force; moreover, the relay can achieve a “mechanical-electrical” separation function during installation.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-343
(22) Filed: 17/11/2024

(23) Priority Data:
China, Number :2023115237413, Date : 15-11-2023.

(71) Applicant: Xiamen Hongfa Electric Power Controls Co., Ltd. of No. 93 Yinong Road, Haicang District, Xiamen, Fujian 361027, Nationality -China

(72) Inventors:

(74) Agent : DOULAH & DOULAH , {app_representative_address}, Bangladesh

(51) INT. CL. : B61J 3/10

(54) Invention Title: SHUNT, RELAY AND ELECTRONIC METERING DEVICE

(57) Abstract

The present disclosure provides a shunt, a relay, and an electronic metering device, and relates to a field of power technology. The shunt includes a shunt body and a heat dissipation structure. The shunt body includes a metrological acquisition part. The heat dissipation structure includes an insulating heat dissipation member, which is disposed on the shunt body and at least partially corresponding to the metrological acquisition part. Since the insulating heat dissipation member is disposed at at least partially corresponding to the metrological acquisition part, the insulating heat dissipation member can absorb some heat, which can achieve a good heat dissipation effect and reduce a risk of burning out due to an excessive temperature rise of the metrological acquisition part, which is equivalent to adding a heat dissipation channel around the metrological acquisition part. At the same time, the insulating heat dissipation member is made of an insulating material and has a certain insulation effect. The insulating heat dissipation member plays a role in current insulation and isolation, so that the current will not be diverted to the insulating heat dissipation member, but instead the current will only be transmitted along the metrological acquisition part, improving the accuracy of the metrological acquisition part during metering.

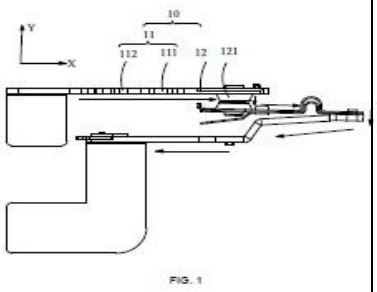


FIG. 1

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-358
(22) Filed: 03/12/2024

(23) Priority Data:
Republic of Korea, Number :1020240105794, Date : 08-08-2024.

(71) Applicant: Rothwell Water. co,.Ltd. of 930-ho, Da-dong, 135 Misagangbyeonhangang-ro, Hanam-si, Gyeonggi-do 12902, Nationality -Republic of Korea

(72) Inventors:

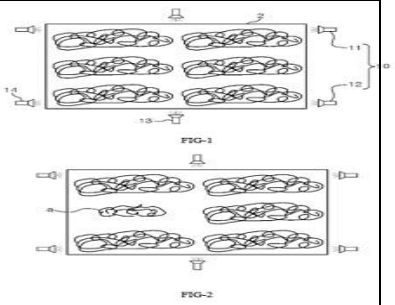
(74) Agent : DOULAH & DOULAH, {app_representative_address}, Bangladesh

(51) INT. CL. : A61B 5/00

(54) Invention Title: Monitoring Device For Abnormalities In The Diffuser That Detects Digester Sleep Patterns

(57) Abstract

The present invention relates to a system for monitoring an abnormality of a diffuser by sensing water surface patterns of a digester, the system including: a plurality of cameras for capturing images of the water surface pattens of the digester in a plurality of directions; and a controller for storing an abnormal water surface pattern when the diffuser operates abnormally on the images captured by the plurality of cameras at a plurality of angles on the water surface of the digester using an artificial intelligence model, comparing the water surface patterns on the images captured by the plurality of cameras with the abnormal water surface pattern using the artificial intelligence model, and if a compared result is greater than a given similarity level, determining that the diffuser is abnormal.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-359
(22) Filed: 03/12/2024

(23) Priority Data:
Republic of Korea, Number :1020240136273, Date : 08-10-2024.

(71) Applicant: Rothwell Water. co,.Ltd. of 930-ho, Da-dong, 135 Misagangbyeonhangang-ro, Hanam-si, Gyeonggi-do 12902, Nationality -Republic of Korea

(72) Inventors:

(74) Agent : DOULAH & DOULAH, {app_representative_address}, Bangladesh

(51) INT. CL. : F24D 9/02

(54) Invention Title: Water Treatment System

(57) Abstract

Disclosed is a water treatment system including: a reaction tank which when influent to be treated is introduced, performs water treatment, and then, discharges the influent, and which includes at least one of an anoxic tank for removing nitrogen components through denitrification of influent, and an anaerobic tank for phosphorus release, and an aerobic tank performing nitrification of the influent introduced from one of the anoxic tank and the anaerobic tank, phosphorus absorption, and decomposition of organic matters; an air supply unit which is connected to the reaction tank and supplies air to the reaction tank to provide oxygen to microorganisms for decomposition of the organic matters; a settling tank which when the discharged influent is introduced, separates the influent into supernatant and activated sludge; a degassing unit which degasses the activated sludge from the reaction tank or the settling tank; and a sensor unit installed in at least one of the anoxic tank, the anaerobic tank, the aerobic tank, the settling tank, and the degassing unit of the reaction tank to collect information.

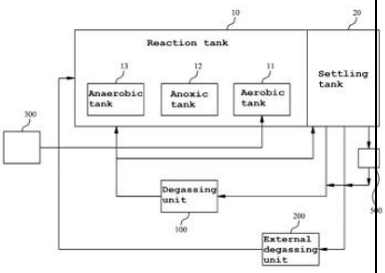


FIG-1

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-31
(22) Filed: 28/01/2025

(23) Priority Data:
China, Number :2024202883234, Date : 07-02-2024.

(71) Applicant: Xiamen Hongfa Electric Power Controls Co.,Ltd. of No.93, Yinong Road, Haicang District, Xiamen, Fujian Province, 361027, Nationality -China

(72) Inventors:

(74) Agent : DOULAH & DOULAH, {app_representative_address}, Bangladesh

(51) INT. CL. : H01H 50/54

(54) Invention Title: RELAY

(57) Abstract
The present disclosure discloses a relay, including an insulating cover, a static contact, and a protective layer. The insulating cover has a chamber inside, and the insulating cover further has a through hole communicated with the chamber. The static contact is limited in the through hole. The static contact has a contact end and a connecting end. The contact end extends into the chamber, and the connecting end extends out of an outer surface of the insulating cover. A side of the connecting end facing away from the insulating cover has a connecting surface. The protective layer covers the connecting surface and is configured to be electrically connected to a conductive member.

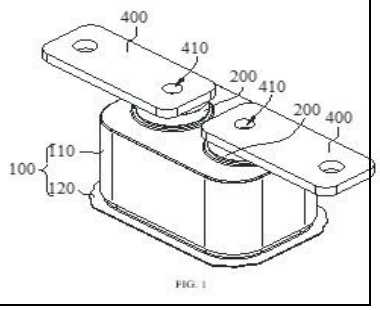


FIG. 1

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-41
(22) Filed: 30/01/2025

(23) Priority Data:
China, Number :2024101615647, Date : 04-02-2024.

(71) Applicant: Xiamen Hongfa Electric Power Controls Co., Ltd. of No. 93 Yinong Road, Haicang District, Xiamen, Fujian 361027, Nationality -China

(72) Inventors:

(74) Agent : Doulah & Doulah, {app_representative_address}, Bangladesh

(51) INT. CL. : F24H 15/292

(54) Invention Title: RELAY AND ELECTRICITY METER

(57) Abstract

A relay and an electricity meter are provided. The relay includes a contact part including a movable contact piece with an extension direction and two static contact pieces, the static contact pieces including electrical connection terminal; static contacts on the two static contact pieces correspond to the movable contacts at both ends of the movable contact piece, respectively; a magnetic circuit part including a coil assembly with an axial direction parallel to the moving direction of the movable contact piece and a magnetic rotation part between the coil assembly and the movable contact piece, the magnetic rotation part can be driven by the coil body to swing to drive the movable contact piece to move to a closed position or a disconnection position, in the closed position, the movable contacts are contact with corresponding static contacts, in the disconnection position, the movable contacts are separated from corresponding static contacts.

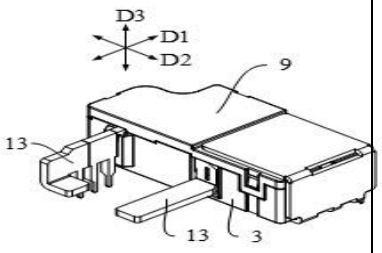


FIG. 1

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-42
(22) Filed: 30/01/2025

(23) Priority Data:
China, Number :2024101608111, Date : 04-02-2024.

(71) Applicant: Xiamen Hongfa Electric Power Controls Co., Ltd. of No. 93 Yinong Road, Haicang District, Xiamen, Fujian 361027, Nationality -China

(72) Inventors:

(74) Agent : Doulah & Doulah, {app_representative_address}, Bangladesh

(51) INT. CL. : F24H 15/292

(54) Invention Title: RELAY AND ELECTRICITY METER

(57) Abstract

A relay and an electricity meter are provided. The relay includes a contact part including a movable contact piece and a static contact piece; a magnetic circuit part including a coil assembly and an armature assembly, the coil assembly includes a coil body for driving the armature assembly to swing around a first axis through a magnetic force; and a swing connector having a first end and a second end, the swing connector can rotate around a second axis; a distance from the first end to the second axis is smaller than a distance from the second end to the second axis; the first end of the swing connector is rotated by the armature assembly, and the second end drives the movable contact piece to move to a closed position or a disconnection position, where the movable contact piece is in contact with or separated from the static contact piece.

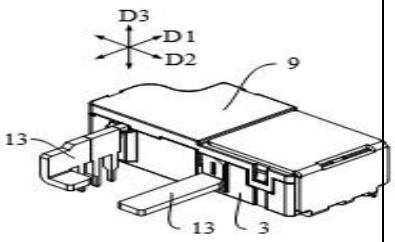


FIG. 1

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-43
(22) Filed: 30/01/2025

(23) Priority Data:
China, Number :202410160773, Date : 04-02-2024.

(71) Applicant: Xiamen Hongfa Electric Power Controls Co., Ltd. of No. 93 Yinong Road, Haicang District, Xiamen, Fujian 361027, Nationality -China

(72) Inventors:

(74) Agent : Doulah & Doulah, {app_representative_address}, Bangladesh

(51) INT. CL. : F24H 15/292

(54) Invention Title: RELAY AND ELECTRICITY METER

(57) Abstract

A relay and an electricity meter are provided. The relay includes a static contact piece; a movable contact part including a movable contact piece and a first elastic member connected to the movable contact piece; a magnetic circuit part for driving the movable contact piece to switch between a closed position and a disconnection position, in the closed position, the movable contact piece is contact with the static contact piece, and in the disconnection position, the movable contact piece is disconnected with the static contact piece; a base provided with a limiting part, the limiting part enable the first elastic member to store energy when the movable contact piece is in the closed and disconnection positions, and to apply a force capable of moving away from and moving toward the static contact piece on the movable contact piece, respectively.

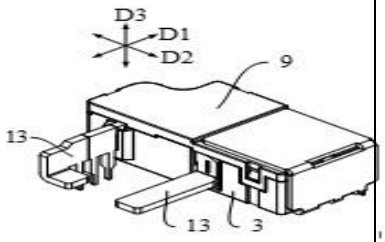


FIG. 1

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-44
(22) Filed: 30/01/2025

(23) Priority Data:
China, Number :2024101614983, Date : 04-02-2024.

(71) Applicant: Xiamen Hongfa Electric Power Controls Co., Ltd. of No. 93 Yinong Road, Haicang District, Xiamen, Fujian 361027, Nationality -China

(72) Inventors:

(74) Agent : Doulah & Doulah, {app_representative_address}, Bangladesh

(51) INT. CL. : F24H 15/292

(54) Invention Title: RELAY AND ELECTRICITY METER

(57) Abstract

A relay and an electricity meter are provided. The relay includes a housing; a pushing member capable of moving in a first direction; a contact part including at least one movable contact assembly and at least one static contact assembly, the movable contact assembly includes a movable contact piece mounted on the pushing member and extending in a second direction; each static contact assembly includes two electrical connection terminals, and the static contacts on each static contact assembly respectively correspond to the movable contacts on the movable contact assembly; and a magnetic circuit part including a coil assembly and a magnetic rotating part for receiving a magnetic force of the coil assembly and swing to drive the movable contacts to close or disconnect the static contacts through the push the pushing member.

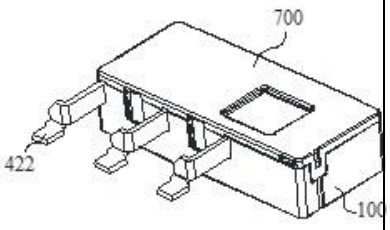


FIG. 1

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-45
(22) Filed: 30/01/2025

(23) Priority Data:
China, Number :2024101615238, Date : 04-02-2024.

(71) Applicant: Xiamen Hongfa Electric Power Controls Co., Ltd. of No. 93 Yinong Road, Haicang District, Xiamen, Fujian 361027, Nationality -China

(72) Inventors:

(74) Agent : Doulah & Doulah, {app_representative_address}, Bangladesh

(51) INT. CL. : F24H 15/292

(54) Invention Title: RELAY AND ELECTRICITY METER

(57) Abstract

The present disclosure provides a relay and an electricity meter. The relay includes a magnetic circuit part including a coil along a first direction, two yokes respectively connected to two ends of the coil; a magnetic rotating part capable of switching rotation directions when a forward and a reverse pulse voltage are flowing through the coil; a contact part including at least one movable contact assembly with each including a movable contact piece and at least one static contact assembly with each including two electrical connection terminals, the static contacts of each static contact assembly correspond to the movable contacts of the movable contact piece; and a pushing member driven by the magnetic rotating part to move in the first direction, the movable contact piece moves with the pushing member to close or disconnect with the static contact assembly. Wherein the coil and the magnetic rotating part are respectively located at both sides of the pushing member in a second direction.

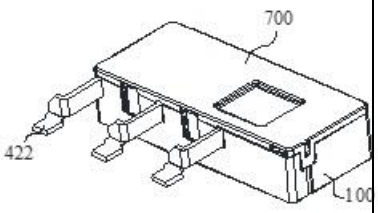


FIG. 1

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-46
(22) Filed: 30/01/2025

(23) Priority Data:
Netherlands, Number :2036920, Date : 30-01-2024.

(71) Applicant: CuRe Technology BV. of Eerste Bokslootweg 17DJ, Nationality -Netherlands

(72) Inventors:

(74) Agent : Doulah & Doulah, {app_representative_address}, Bangladesh

(51) INT. CL. : B22F 10/70

(54) Invention Title: A METHOD TO ENABLE THE RECYCLING A STREAM OF POLYESTER WASTE MATERIAL AND A SYSTEM FOR APPLYING THE METHOD

(57) Abstract

The present invention pertains to a process to enable the recycling of a stream of polyester waste material by depolymerising the polyester present in the stream of polyester waste material into a reactive oligomeric ester, the process comprising providing the polyester in a liquid form in a reactor, and feeding an alcohol to the reactor to subject the polyester to the alcoholysis to depolymerise the polyester, while at the same time adding an amount of water and an amount of carboxylic acid, to form the reactive oligomeric ester. The invention also pertains to a system for using this process.

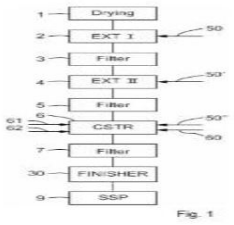


Fig. 1

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-53
(22) Filed: 04/02/2025

(23) Priority Data:
United Kingdom, Number :24014953, Date : 05-02-2024. and United Kingdom, Number :24123366, Date : 21-08-2024.

(71) Applicant: POLYMATERIA LIMITED. of First Floor, 5 Fleet Place, London, EC4M 7RD, Nationality -United Kingdom

(72) Inventors:

(74) Agent : Doulah & Doulah, {app_representative_address}, Bangladesh

(51) INT. CL. : C08L 23/06

(54) Invention Title: Degradable Polymer Composition

(57) Abstract

The present invention relates to a degradable polymer composition comprising: (a) a polyolefin; (b) one or more transition metal compounds in a total amount of from 0.03 to 0.6wt%, based on the total weight of the polymer composition, (c) one or more non-coordinated, saturated C14-C24 carboxylic acid or an ester, anhydride or amide thereof, in an amount of from 0.01 to 0.6wt%, based on the total weight of the polymer composition; (d) a rubber in an amount of from 0.02 to 0.65wt%, based on the total weight of the composition; (e) an antioxidant stabilizer composition in an amount of from 0.005 to 0.48 wt%, based on the total weight of the composition; wherein the one or more transition metal compounds comprises iron, manganese, copper, cobalt or cerium, and wherein the antioxidant stabiliser composition comprises a phenolic antioxidant, a non-phenolic antioxidant and a mineral acid scavenger.

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-120
(22) Filed: 24/03/2025

(23) Priority Data:
China, Number :2024103619604, Date : 27-03-2024.

(71) Applicant: Xiamen Hongfa Electric Power Controls Co., Ltd. of 93 Yinong Road, Haicang District, Xiamen, Fujian 361027, Nationality -China

(72) Inventors:

(74) Agent : DOULAH & DOULAH, {app_representative_address}, Bangladesh

(51) INT. CL. : G01R 22/06

(54) Invention Title: RELAY AND ELECTRICITY METER

(57) Abstract

The present disclosure provides a relay with low energy consumption and an electricity meter. The relay includes a housing member, an electrical control part, and a guide member; the electrical control part includes a static contact group and a movable contact unit, the static contact group is fixed to the housing member and includes two static contact members arranged along the X-axis direction, the movable contact unit moves relative to the housing member along the Y-axis direction and includes a movable contact group corresponding to the static contact group, the movable contact group includes a movable contact member, the movable contact member has two movable contacts arranged along the X-axis direction, the two movable contacts can contact or move away from corresponding static contact members along the Y-axis direction, wherein the Y-axis direction is perpendicular to the X-axis direction; the guide member is fixed to the housing member and is located between the two movable contacts along the X-axis direction; the guide member is slidably fit with the movable contact unit along a straight line, the straight line extends along the Y-axis direction. The relay

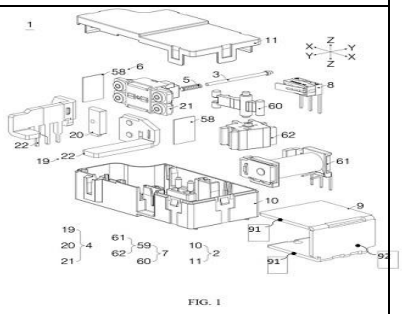


FIG. 1

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-121
(22) Filed: 24/03/2025

(23) Priority Data:
China, Number :2024206452092, Date : 29-03-2024.

(71) Applicant: Xiamen Hongfa Electric Power Controls Co., Ltd. of 93 Yinong Road, Haicang District, Xiamen, Fujian 361027, Nationality -China

(72) Inventors:

(74) Agent : DOULAH & DOULAH, {app_representative_address}, Bangladesh

(51) INT. CL. : H01H 1/00

(54) Invention Title: RELAY

(57) Abstract

The present disclosure provides a relay including a housing; a magnetic circuit assembly disposed on the housing; and a contact assembly that includes a movable contact part and two static contact parts. The movable contact part includes a movable contact bridge extending in a first direction, and a movable contact is disposed at each of two ends of the movable contact bridge in the first direction; each of the two static contact parts is provided with a static contact and a load connecting portion, two load connecting portions are located at a same side of the movable contact bridge in the first direction, and static contacts of the two static contacts are respectively arranged corresponding to two movable contacts of the movable contact bridge; one of the two static contact parts corresponding to the movable contact away from the load connecting portion along the first direction is a first static contact part, and the first static contact part is provided with a first current-passing portion; when the two movable contacts and the corresponding static contacts are closed, the first current-passing portion is at least partially located at a side of the movable contact bridge facing away from the static contacts, and a current passage direction of the first current-passing portion is opposite to a current passage direction of the movable contact bridge.

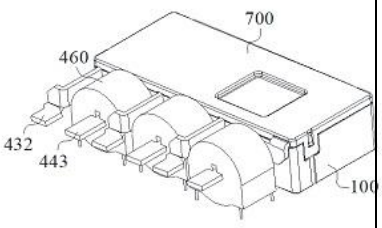


FIG. 1

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-122
(22) Filed: 24/03/2025

(23) Priority Data:
China, Number :2024103967034, Date : 02-04-2024.

(71) Applicant: Xiamen Hongfa Electric Power Controls Co., Ltd. of No. 93 Yinong Road, Haicang District, Xiamen, Fujian 361027, Nationality -China

(72) Inventors:

(74) Agent : DOULAH & DOULAH , {app_representative_address}, Bangladesh

(51) INT. CL. : G01R 22/06

(54) Invention Title: RELAY AND ELECTRICITY METER

(57) Abstract

The present provides a relay with low energy consumption and an electricity meter. The relay includes a fixed unit and a movable contact unit. The fixed unit includes a static contact group, which includes two static contact members arranged along the X-axis direction. The movable contact unit moves relative to the fixed unit along the Y-axis direction and includes a movable contact group corresponding to the static contact group. The movable contact group includes a movable contact member, which can connect or disconnect with the static contact group along the Y-axis direction. The movable contact member includes two movable contacts corresponding to the two static contact members, respectively, and the two movable contacts are arranged along the X-axis direction. The movable contact unit includes a guiding portion, which is slidably fit with the fixed unit along a straight line extending along the Y-axis direction and located in the middle of the two movable contacts along the X-axis direction. The projection of the part of the guiding portion that is slidably fit with the fixed unit on the straight line does not overlap with the projection of the other parts of the movable contact unit, except for the guiding portion, on the straight line.

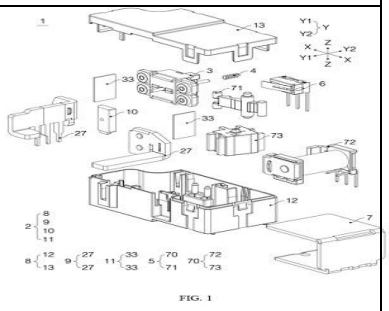


FIG. 1

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-248
(22) Filed: 24/08/2025

(23) Priority Data:
China, Number :2024220613214, Date : 23-08-2024.

(71) Applicant: Xiamen Hongfa Electric Power Controls Co.,Ltd. of No.93, Yinong Road, Haicang District, Xiamen, Fujian Province, 361027, Nationality -China

(72) Inventors: (0) Xiamen Hongfa Electric Power Controls Co.,Ltd. of No.93, Yinong Road, Haicang District, Xiamen, Fujian Province, 361027, China Nationality -China

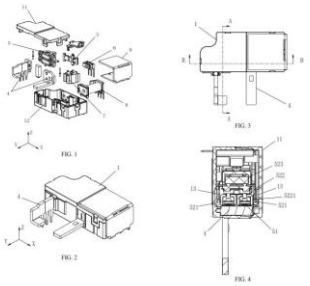
(74) Agent : A.B.M. Sohailud Doulah, Trademark Agent., {app_representative_address}, Bangladesh

(51) INT. CL. : G01R 11/16

(54) Invention Title: ELECTROMAGNETIC RELAY AND ELECTRICITY METER RELATED APPLICATIONS

(57) Abstract

The present disclosure relates to an electromagnetic relay and an electricity meter. The electromagnetic relay includes a housing (1), a magnetic circuit part, a contact part, and a pushing part (52) linked between the magnetic circuit part and the contact part, the contact part includes two stationary contacting members (4) for current inflow and current outflow respectively and a bridge-type movable contacting member (51) fitted between the two stationary contacting members (4), the bridge-type movable contacting member (51) is mounted in the pushing part (52) to jointly form a movable assembly (5), the magnetic circuit part is adapted to drive a driving arm to swing, a tail end of the driving arm is connected to the movable assembly (5) and supports the movable assembly (5) along a direction of a rotating shaft of the driving arm, when the driving arm swings, the driving arm drives the movable assembly (5) to move towards or away from the stationary contacting member (4), the movable assembly (5) and the housing (1) are provided with a protruding portion (521) and a guide sliding groove (13) which are fitted with each other, and the movable assembly (5) linearly reciprocates in a preset direction through fitting of the protruding portion (521) and the guide sliding groove (13).



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-275
(22) Filed: 28/09/2025

(23) Priority Data:
N/A

(71) Applicant: Bangladesh Council of Scientific and Industrial Research of Dr. Qudrat-i-Khuda Road, Dhanmondi, Dhaka-1205, Nationality -Bangladesh

(72) Inventors: (1) Swapan Kumer Ray of , Bangladesh Nationality -Bangladesh, (2) Quazi Shushma Afroz of , Bangladesh Nationality -Bangladesh, (3) Riyadh Hossen Bhuiyan of , Bangladesh Nationality -Bangladesh, (4) Dr. Md. Tanvir Muslim of , Bangladesh Nationality -Bangladesh, (5) Dr. Md. Qamrul Ehsan of , Bangladesh Nationality -Bangladesh

(74) Agent : Masud bcsir, {app_representative_address}, Bangladesh

(51) INT. CL. : C08H 7/00

(54) Invention Title: Production Method of Natural Rubber-Modified Lignin Nanocomposite as Bitumen Modifier.

(57) Abstract

The present invention relates to a bitumen composition modified with a natural rubber–acetobrominated lignin nanocomposite and to a method for producing the same. The invention provides a sustainable and environmentally friendly alternative to petroleum-derived polymer modifiers by chemically functionalizing lignin via acetobromination to enhance its compatibility with natural rubber and also bitumen. The resulting nanocomposite, when incorporated into bitumen at 2–10 wt%, imparts superior high-temperature rheological stability, enhanced oxidative and ultraviolet resistance, and improved durability, without compromising low-temperature flexibility. The nanocomposite exhibits nanoscale dispersion of acetobrominated lignin within the rubber matrix, facilitating uniform reinforcement of the bituminous binder. The invention also discloses a scalable method for preparing the nanocomposite and its integration into bitumen using conventional asphalt production equipment. This innovation contributes to the development of high-performance, bio-based paving materials with improved aging resistance, recyclability, and reduced environmental footprint.

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-292
(22) Filed: 07/10/2025

(23) Priority Data:
Taiwan, Number :113145184, Date : 22-11-2024.

(71) Applicant: FORMOSA SAINT JOSE CORP. of 1st Fl., No. 319, Jia Shing Street, Taipei 106, Taiwan, ROC, Nationality -Taiwan

(72) Inventors: (0) FORMOSA SAINT JOSE CORP. of 1st Fl., No. 319, Jia Shing Street, Taipei 106, Taiwan, ROC, Taiwan Nationality -Taiwan

(74) Agent : A.B.M. Sohailud Doulah, Trademark Agent., {app_representative_address}, Bangladesh

(51) INT. CL. : A47C 27/08

(54) Invention Title: INFLATABLE MATTRESS STRUCTURE WITH DETACHABLE AIR COLUMN

(57) Abstract

ABSTRACT OF THE DISCLOSURE

An inflatable mattress structure includes a cover including a first top cover portion, a second bottom cover portion arranged opposite to the first top portion and integrally extended from the first top cover portion to form an inner space; at least one main divider comprising a first divider end coupled with the first top cover portion and a second divider end coupled with the second bottom cover portion to divide the inner space into at least two sub-inner spaces; an air column detachably arranged inside the inner space and passed through each of the sub-inner spaces one by one; and an air valve coupled with a free end of the air column.

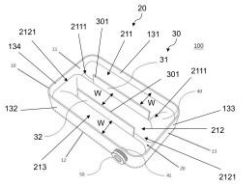


FIG. 1A

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-319
(22) Filed: 29/10/2025

(23) Priority Data:
N/A

(71) Applicant: Philippe Magnier LLC of 6024 Feagan Street, Houston, Texas 77007, Nationality -United States of America

(72) Inventors: (0) Philippe Magnier LLC of 6024 Feagan Street, Houston, Texas 77007, United States of America Nationality -United States of America

(74) Agent : A.B.M. Sohailud Doulah, Trademark Agent., {app_representative_address}, Bangladesh

(51) INT. CL. : B02C 11/06

(54) Invention Title: TECHNOLOGIES FOR PREVENTING THE EXPLOSION OF ELECTRICAL TRANSFORMERS

(57) Abstract

ABSTRACT OF THE DISCLOSURE

An adaptor (11) for an electrical transformer explosion prevention device comprising: a first drilled interface (111) in a first region of a lower wall; a second drilled interface (112) in a first region of an upper wall, the first drilled interface and the second drilled interface being concentric with a first axis; a first set of bolt holes positioned about the first drilled interface such that the adaptor can be secured to a transformer tank outlet (2c); and an adaptor outlet (113a) with an adaptor outlet flange (113) secured to a second region of the upper wall and concentric with a second axis, for attaching a static spring pressure relief valve (22) to the adaptor outlet flange member. Devices and transformers comprising the adaptor, and control arrangements for controlling such devices and transformers, are also disclosed.

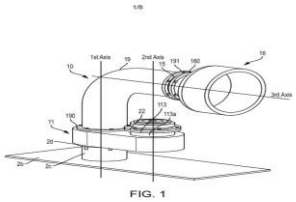


FIG. 1

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-321
(22) Filed: 30/10/2025

(23) Priority Data:
United States of America, Number :63714085, Date : 30-10-2024.

(71) Applicant: Securiport LLC of 1900 Reston Metro Plaza, Suite 800, Reston, VA 20190, Nationality -United States of America

(72) Inventors: (0) Securiport LLC of 1900 Reston Metro Plaza, Suite 800, Reston, VA 20190, United States of America Nationality -United States of America

(74) Agent : A.B.M. Sohailud Doulah, Trademark Agent., {app_representative_address}, Bangladesh

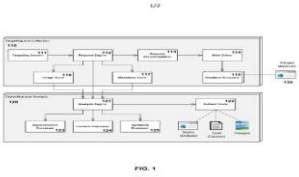
(51) INT. CL. : G01V 1/30

(54) Invention Title: SYSTEM AND METHOD FOR WEBSITE ANALYSIS USING COMPUTER VISION

(57) Abstract

ABSTRACT

A system and method for website analysis using computer vision processes rendered webpages as visual documents rather than parsing code structures. The system renders target webpages in browser environments to generate pixel-based visual representations, applies computer vision models trained specifically on webpage layout patterns to segment the representations into distinct content regions, classifies regions based on visual characteristics and semantic analysis, and synthesizes structured output artifacts. The approach maintains extraction consistency despite changes in underlying website markup structures, reducing maintenance requirements compared to traditional DOM-based scraping methods. The system supports applications including accessibility enhancement, content moderation, competitive intelligence, digital archiving, and news aggregation while respecting legal and ethical boundaries.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-322
(22) Filed: 03/11/2025

(23) Priority Data:
India, Number :202441085180, Date : 06-11-2024.

(71) Applicant: TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, Nationality -India

(72) Inventors: (1) PATTABIRAMAN VENUGOPALAN of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (2) GUTTI GNANAKOTAIAH of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (3) Davinder KUMAR of TVS Motor Company Limited, Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (4) KUDUVA SHANTHULAL VISHNUKUMAR of “Chaitanya”, No. 12 Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, Tamil Nadu, India Nationality -India, (5) RAMALINGAM GOVINDHARAJ of c/o TVS MOTOR COMPANY LIMITED, Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (6) Anandkumar KUMARASWAMY of TVS Motor Company Limited, Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India

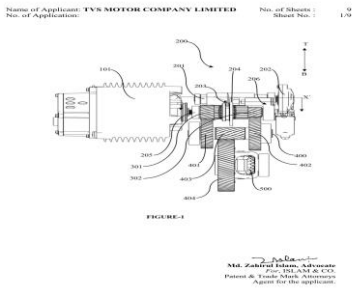
(74) Agent : Md. Zahirul Islam, Advocate, Islam & Co., {app_representative_address}, Bangladesh

(51) INT. CL. : B60K 23/00

(54) Invention Title: A TRANSMISSION ASSEMBLY, A SHIFTING MEMBER, AND METHODS THEREOF

(57) Abstract

The present subject matter relates generally to a transmission assembly (200), a shifting member (204), and methods (600,700) to engage and disengage a lock assembly (206) of a vehicle. The transmission assembly (200) comprises a gear shift shaft (201), a gear shifting fork (203),a shifting member (204), and a lock assembly (206). The gear shifting fork (203) engages with the gear shift shaft (201) to move in a linear motion upon a rotation of the gear shift shaft (201) in order to slide the shifting member (204). The lock assembly (206) engages with the shifting member (204) through one of a plurality of locking apertures (204H) of the shifting member (204) to restrict the transmission of the torque from the shifting member (204) to one of a plurality of drive gear assemblies (301, 302).



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-323
(22) Filed: 03/11/2025

(23) Priority Data:
India, Number :202441085719, Date : 08-11-2024.

(71) Applicant: TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, , Nungambakkam, Chennai 600 006, Nationality -India

(72) Inventors: (1) OBED ABISHEK RAMESH of TVS MOTOR COMPANY LIMITED, Chaitanya, No.12, Khader Nawaz Khan Road,, Nungambakkam, Chennai 600 006, India Nationality -India, (2) GANESH RAO PADUBIDRI of TVS MOTOR COMPANY LIMITED, Chaitanya, No.12, Khader Nawaz Khan Road,, Nungambakkam, Chennai 600 006, India Nationality -India, (3) MUTHUSAMY SIVAPRADEEP of TVS MOTOR COMPANY LIMITED, Chaitanya, No.12, Khader Nawaz Khan Road,, Nungambakkam, Chennai 600 006, India Nationality -India, (4) MOSALI NAGARJUN REDDY of TVS MOTOR COMPANY LIMITED, Chaitanya, No. 12, Khader Nawaz Khan Road, , Nungambakkam, Chennai 600006, India Nationality -India

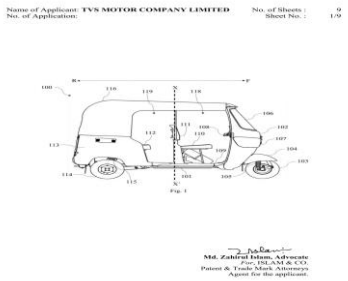
(74) Agent : Md. Zahirul Islam, Advocate, Islam & Co., {app_representative_address}, Bangladesh

(51) INT. CL. : B60J 7/20

(54) Invention Title: A STORAGE COMPONENT FOR A VEHICLE

(57) Abstract

The present invention pertains toa storage container for a vehicle (100). The vehicle (100)comprisesa front portion (118)anda rear portion (119). The rear portion (119) may include a seat assembly (206) which includes a first member (206a) and a second member (206b).The vehicle (100) further includes at least one storage component (202)thatis detachably coupled to a rear portion the first member (206a). Theat least one storage component (202) includes a first part (902) and a second part (906). The second part (906) includes a recess structure (906a) such that the recess structure (906a) provides a space for accommodating at least one vehicular component (204) associated with the vehicle (100).



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-333
(22) Filed: 06/11/2025

(23) Priority Data:
N/A

(71) Applicant: Akram Hossain of Flat-A8, House-09, Road- Shayesta Khan Avenue, Sector-4, Dhaka, Uttara, 1230, Bangladesh, Mohammad Razib Mustafiz of 276,Old Mosque Road, Boro Deora, Cherag Ali, Gazipur, Tongi, Nationality -Bangladesh

(72) Inventors: (0) Akram Hossain of Flat-A8, House-09, Road- Shayesta Khan Avenue, Sector-4, Dhaka, Uttara, 1230, Bangladesh, (1) Mohammad Razib Mustafiz of 276,Old Mosque Road, Boro Deora, Cherag Ali, Gazipur, Tongi, Bangladesh Nationality -Bangladesh

(74) Agent : Md.Shariar Hasan Joy, Advocate, {app_representative_address}, Bangladesh

(51) INT. CL. : G10L 25/30

(54) Invention Title: System and Method for Automated Retinal Image Analysis Using Deep Neural Networks

(57) Abstract

Abstract
The invention relates to a computerized system for retinal image analysis using deep neural networks. It comprises a quantized ResNet-50 model for classification of image features associated with diabetic retinopathy and glaucoma, and a VGG16-based U-Net model for instance segmentation of retinal lesions. The system operates on a hybrid platform, with the classification module deployed offline on mobile devices and the segmentation module hosted on a cloud server. A mobile application enables preliminary image classification, while a web application supports detailed lesion visualization and severity mapping. The architecture facilitates efficient image processing, secure data exchange, and integration with ophthalmic review workflows.

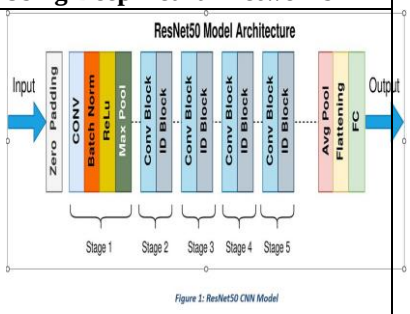


Figure 1: ResNet50 CNN Model

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-334
(22) Filed: 09/11/2025

(23) Priority Data:
India, Number :202441094525, Date : 02-12-2024.

(71) Applicant: TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, , Nungambakkam, Chennai 600 006, Nationality -India

(72) Inventors: (1) GUTTI GNANAKOTAIAH of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (2) MYSORE KRISHNAMURTHY AJAYKUMAR of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (3) RASU VARALAKSHMY of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (4) KUDUVA SHANTHULAL VISHNUKUMAR of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (5) VIGNESH VIJAYAKUMAR of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India

(74) Agent : Md. Zahirul Islam, Advocate, Islam & Co., {app_representative_address}, Bangladesh

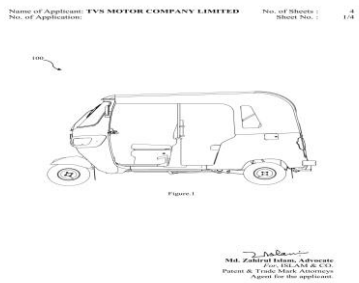
(51) INT. CL. : F02M 35/024

(54) Invention Title: AN AIR FILTER ASSEMBLY FOR A POWER UNIT

(57) Abstract

ABSTRACT

The present disclosure relates to anair filter assembly (300), for a power unit of a vehicle (100). The air filter assembly (300) comprises an air filter device (102) with at least one inlet pipe (104a, 104b) fluidically connected to the air filter device (102) to supply air from ambience to the air filter device (102) and at least one separation unit (106) configured with at least one of the air filter device (102). The one separation unit (106) comprises at least one hollow member (402) having a predefined curved profile to separate contaminants from air.Further, the hollow member (402) comprises a protruded outlet portion (404) with an outlet opening (406), the protruded outlet portion (404) being provided at a predefined position of the hollow member (402).



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-335
(22) Filed: 09/11/2025

(23) Priority Data:
India, Number :202541000647, Date : 03-01-2025.

(71) Applicant: TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, , Nungambakkam, Chennai 600 006, Nationality -India

(72) Inventors: (1) ADITYA VASUDEO PARDESHI of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (2) SARAVANAN SUBRAMANI of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India

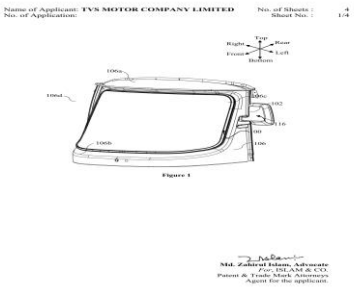
(74) Agent : Md. Zahirul Islam, Advocate, Islam & Co., {app_representative_address}, Bangladesh

(51) INT. CL. : B60R 1/06

(54) Invention Title: MOUNTING ASSEMBLY FOR MIRROR OF A VEHICLE, MIRROR ASSEMBLY AND VEHICLE THEREOF

(57) Abstract

ABSTRACT
Present invention provides a mounting assembly (100) for a mirror (102) of a vehicle. The mounting assembly (100) comprises a mounting bracket (104) having a first surface (104a) adapted to pivotally engage with the mirror (102) and a second surface (104b) adapted to slidably engage with a body panel (106) of the vehicle. The mounting assembly (100) facilitates height adjustment of the mirror (102).



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-339
(22) Filed: 12/11/2025

(23) Priority Data:
India, Number :202541003716, Date : 16-01-2025.

(71) Applicant: TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road,, Nungambakkam, Chennai 600 006, Nationality -India

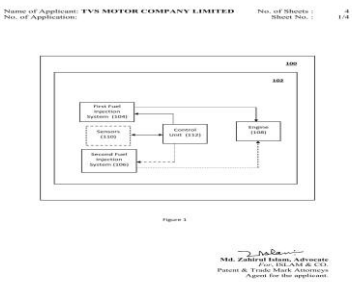
(72) Inventors: (1) PRADHEEP RAJASEKARAN of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (2) JAYAJOTHI JOHNSON VETHANAYAGAM of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (3) NAGARJUN REDDY MOSALI of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (4) HARIHARAN RAMAR of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (5) GOPAL SETHURAMAN of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (6) BALAJI RAVICHANDRAN VIGNESH of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India

(74) Agent : Md. Zahirul Islam, Advocate, Islam & Co., {app_representative_address}, Bangladesh

(51) INT. CL. : F02D 41/40

(54) Invention Title: A SYSTEM AND METHOD FOR CONTROLLING A FUEL INJECTION IN A MULTI-FUEL VEHICLE

(57) Abstract



ABSTRACT

The present invention relates to a system (102) for controlling fuel injection in a multi-fuel vehicle (100). The system (100) comprises a plurality of fuel injection systems (104, 106) and a control unit (112) communicatively coupled to the plurality of fuel injection systems. The control unit (112) is configured to determine at least one of the one or more engine parameters and the one or more vehicle parameters associated with the multi-fuel vehicle. Based on the determined at least one of the one or more engine parameters and the one or more vehicle parameters, the control unit (112) is configured to determine at least one operating zone of the engine (108). Based on the determined operating zone of the engine (108), the control unit is configured to dynamically control switching between plurality of fuel injection systems (104, 106).

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-340
(22) Filed: 16/11/2025

(23) Priority Data:
India, Number :202541022749, Date : 13-03-2025.

(71) Applicant: TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, Nationality -India

(72) Inventors: (1) ADITYA VASUDEO PARDESHI of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (2) MUTHUSANKARALINGAM SANKARALINGAM TAMILKUMARAN of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (3) SARAVANAN SUBRAMANI of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India

(74) Agent : Md. Zahirul Islam, Advocate, Islam & Co., {app_representative_address}, Bangladesh

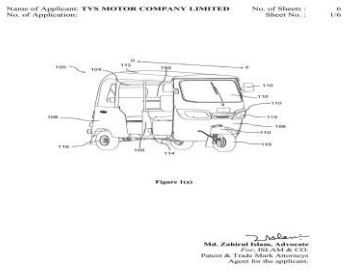
(51) INT. CL. : B60J 10/77

(54) Invention Title: A SEALING COMPONENT IN A VEHICLE

(57) Abstract

ABSTRACT

The present subject matter relates to a vehicle (100) comprisinga front compartment (102) comprises one or more body panels (108), and a sealing member (214). The one or more cavities (118) on the one or more body panels (108) are configured to receive one or more vehicular components (110). The sealing member (214) is disposed between a vehicular component (110) of the one or more vehicular components (110) and a body panel (108) of the one or more body panels (108), wherein the sealing member (214) surrounds a peripheral portion (210b) of the vehicular component (110). The present subject matter prevents ingress of external environmental factors such as rain, moisture, dust, and mud into the compartment adjoining the one or more body panel (108) on which the vehicular component (110) is mounted.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-341
(22) Filed: 16/11/2025

(23) Priority Data:
India, Number :202541016309, Date : 25-02-2025.

(71) Applicant: TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, Nationality -India

(72) Inventors: (1) POGULA SAI MANEESH of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (2) THANGARASU KARTHIK of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (3) HYARANE BYRASHETTY BASAVARAJ of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (4) BOOBALAN MANI of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (5) VETHANAYAGAM JAYAJOTHI JOHNSON of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India

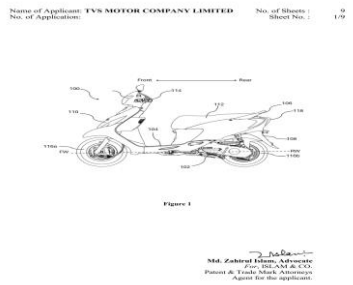
(74) Agent : Md. Zahirul Islam, Advocate, Islam & Co., {app_representative_address}, Bangladesh

(51) INT. CL. : F02M 26/62

(54) Invention Title: A FUEL PRESSURE REDUCER IN A VEHICLE

(57) Abstract

ABSTRACT
The present invention relates to a fuel pressure reducer in a vehicle (100). The vehicle (100) comprisesa frame structure (300) and one or more cylinders (204). The one or more cylinders (204) store fuel and are configured with the frame structure (300). At least one fuel pressure reducer (210) is fluidically coupled to the one or more cylinders (204). The at least one fuel pressure reducer (210) is configured ahead of a tail lamp assembly (118), behind a handlebar assembly (114) and above an axis (FW-RW) connecting axles of one or more front wheels (116a) and one or more rear wheels (116b) of the vehicle (100) from a vehicle side view.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-342
(22) Filed: 16/11/2025

(23) Priority Data:
India, Number :202541016312, Date : 25-02-2025.

(71) Applicant: TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, Nationality -India

(72) Inventors: (1) POGULA SAI MANEESH of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (2) THANGARASU KARTHIK of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (3) HYARANE BYRASHETTY BASAVARAJ of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (4) BOOBALAN MANI of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (5) VETHANAYAGAM JAYAJOTHI JOHNSON of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India

(74) Agent : Md. Zahirul Islam, Advocate, Islam & Co., {app_representative_address}, Bangladesh

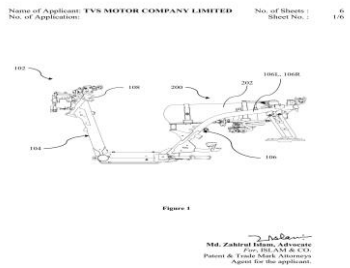
(51) INT. CL. : B60L 50/72

(54) Invention Title: A FUEL SYSTEM FOR A VEHICLE

(57) Abstract

ABSTRACT

Thepresentinvention disclosesa fuel system (200) for a vehicle (100). The fuel system (200) comprises at least one fuel tank (202) to store fuel, at least one valve (204), and one or more pressure sensors (206). The fuel tank (202) is configured with a frame assembly (102) of the vehicle (100). The valve (204) is coupled to at least one opening of the fuel tank (202). The one or more pressure sensors (206) is fluidically coupled to the valve (204). The one or more pressure sensors (206) is disposed on either side of the valve (204). The one or more pressure sensors (206) is configured ahead of a tail lamp assembly, behind a head tube (108) and above an axis FW-RW connecting the axles of one or more front wheels and one or more rear wheels of the vehicle (100).



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-343
(22) Filed: 16/11/2025

(23) Priority Data:
India, Number :202541016311, Date : 25-02-2025.

(71) Applicant: TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, Nationality -India

(72) Inventors: (1) POGULA SAI MANEESH of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (2) THANGARASU KARTHIK of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (3) HYARANE BYRASHETTY BASAVARAJ of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (4) LOHIT VISHWANATH PATIL of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (5) NARAHARISETTI RAMAKRISHNA of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (6) BOOBALAN MANI of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (7) VETHANAYAGAM JAYAJOTHI JOHNSON of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India

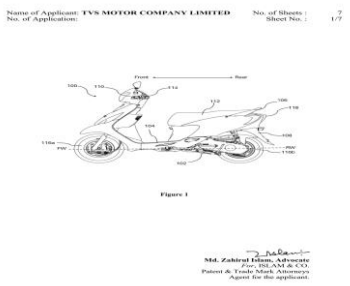
(74) Agent : Md. Zahirul Islam, Advocate, Islam & Co., {app_representative_address}, Bangladesh

(51) INT. CL. : F02M 69/54

(54) Invention Title: A FUEL PRESSURE REGULATOR IN A VEHICLE

(57) Abstract

ABSTRACT
The present invention relates to a fuel pressure regulator in a vehicle (100). The vehicle (100) comprisesa frame structure and one or more cylinders (204). The one or more cylinders (204) store fuel and are configured with the frame structure. At least one fuel pressure regulator (210) is fluidically coupled to the one or more cylinders (204). The at least one fuel pressure regulator (210) is configured ahead of a tail lamp assembly (118), behind a headlampassembly (110) and above an axis (FW-RW) connecting axles of one or more front wheels (116a) and one or more rear wheels (116b) of the vehicle (100) from a vehicle side view.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-344
(22) Filed: 16/11/2025

(23) Priority Data:
India, Number :202541022750, Date : 13-03-2025.

(71) Applicant: TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, Nationality -India

(72) Inventors: (1) MOHD KASHAN KHAN of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (2) RAJKUMAR KISHAN PAWAR of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (3) MUTHUSANKARALINGAM SANKARALINGAM TAMILKUMARAN of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (4) SUBRAMANI SARAVANAN of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (5) MOSALI NAGARJUN REDDY of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India

(74) Agent : Md. Zahirul Islam, Advocate, Islam & Co., {app_representative_address}, Bangladesh

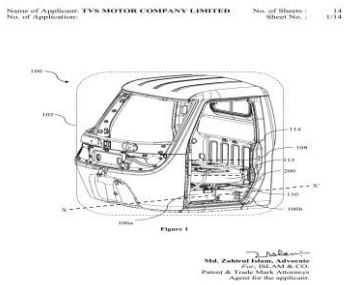
(51) INT. CL. : B61D 3/18

(54) Invention Title: A VEHICLE

(57) Abstract

ABSTRACT

The present subject matter relates to a vehicle (100). The vehicle (100) comprises a front compartment (102). The front compartment (102) includes a central long member (106a) extending along a longitudinal axis (X-X') of the vehicle (100); a seat frame assembly (108) mounted on the central long member (106a); a bridge plate (110) disposed on the central long member (106a); and a mounting unit (200) disposed on the bridge plate (110). The mounting unit (200) is configured to mount a spare wheel (112) such that an entire portion of the spare wheel (112) is enclosed by the seat frame assembly (108).



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-345
(22) Filed: 16/11/2025

(23) Priority Data:
India, Number :202541025908, Date : 21-03-2025.

(71) Applicant: TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, Nationality -India

(72) Inventors: (1) PATTABIRAMAN VENUGOPALAN of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (2) GUTTI GNANAKOTAIAH of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (3) DAVINDER KUMAR of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (4) KUDUVA SHANTHULAL VISHNUKUMAR of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (5) RAMALINGAM GOVINDHARAJ of c/o TVS MOTOR COMPANY LIMITED, Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (6) ANANDKUMAR KUMARASWAMY of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India

(74) Agent : Md. Zahirul Islam, Advocate, Islam & Co., {app_representative_address}, Bangladesh

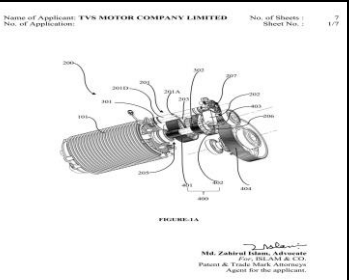
(51) INT. CL. : B60K 23/00

(54) Invention Title: A TRANSMISSION ASSEMBLY FOR A VEHICLE AND A METHOD THEREOF

(57) Abstract

ABSTRACT

The present subject matter relates generally to a transmission assembly (200), a vehicle (100), and a method (600). The transmission assembly (200) comprises an input shaft assembly (205), a driven shaft assembly (400), a gear shift assembly (201), a gear lock member (206), and a lock assembly (207). The gear shift assembly (201) engages the input shaft assembly (205) with a driven shaft assembly (400) in a plurality of torque transfer configurations. The gear lock member (206) is coupled to the input shaft assembly (205). The gear lock member (206) comprises a plurality of locking slots (206S). The lock assembly (207) is coupled with the gear shift assembly (201) to engage with the gear lock member (206) through one of the plurality of locking slots (206S).



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-346
(22) Filed: 16/11/2025

(23) Priority Data:
India, Number :202541028258, Date : 26-03-2025.

(71) Applicant: TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, Nationality -India

(72) Inventors: (1) GUTTI GNANAKOTAIAH of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (2) KUPPUSAMY LOGANATHAN of c/o TVS MOTOR COMPANY LIMITED, Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (3) SURENDRAN PRASANNA RAJESH of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (4) RASU VARALAKSHMY of c/o TVS MOTOR COMPANY LIMITED, Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (5) HARIPRASAD SOUNDARRAJAN of c/o TVS MOTOR COMPANY LIMITED, Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (6) VIGNESH VIJAYAKUMAR of c/o TVS MOTOR COMPANY LIMITED, Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India

(74) Agent : Md. Zahirul Islam, Advocate, Islam & Co., {app_representative_address}, Bangladesh

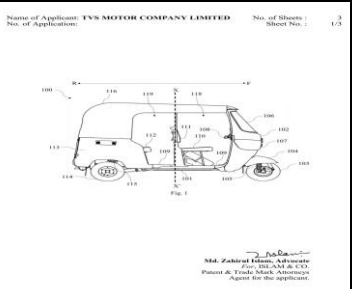
(51) INT. CL. : B61D 23/02

(54) Invention Title: A VEHICLE

(57) Abstract

ABSTRACT

A vehicle (100) comprising a floor structure with a stepped profile (202). The floor structure including a rear floor structure (204) and a cabin floorboard (109). The vehicle (100) also comprises an engine (305) which is configured under the rear floor structure (204) and an engine cooling system (310). The engine cooling system (310) comprising a radiator assembly (312) which is configured along an axis (A-A') of the vehicle (100). Further, the axis (A-A') intersects with a vertical axis (V-V') of the vehicle (100) at a predefined angle (β).



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-347
(22) Filed: 16/11/2025

(23) Priority Data:
India, Number :202541029676, Date : 28-03-2025.

(71) Applicant: TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, Nationality -India

(72) Inventors: (1) BHARANIRAM SENTHILKUMAR of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (2) SARAVANAKUMAR KALIMUTHU of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (3) KARTHIKEYAN KANNAN of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (4) BOOBALAN MANI of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (5) JAYAJOTHI JOHNSON VETHANAYAGAM of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India

(74) Agent : Md. Zahirul Islam, Advocate, Islam & Co., {app_representative_address}, Bangladesh

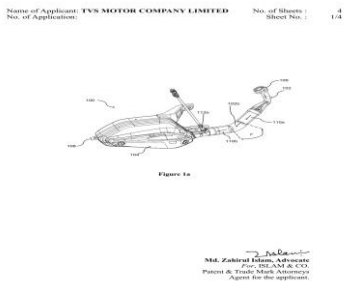
(51) INT. CL. : F01N 13/08

(54) Invention Title: AN EXHAUST ASSEMBLY FOR A VEHICLE

(57) Abstract

ABSTRACT

The present subject matter relates to an exhaust assembly (100) for a vehicle (10). The exhaust assembly (100) comprises an exhaust pipe (102), a muffler (104), a first catalytic converter (110a) and one or more second catalytic converters (110b). The one or more second catalytic converters (110b) are configured downstream to the first catalytic converter (110a) in the exhaust path at a first pre-defined distance (f') from the first catalytic converter (102). The exhaust assembly (100) further comprises a first sensing member (112a) configured upstream of the first catalytic converter (110a), anda second sensing member (112b) configured downstream of the one or more second catalytic converters (110b) at a second pre-defined distance (s').



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-348
(22) Filed: 17/11/2025

(23) Priority Data:
India, Number :202541029812, Date : 28-03-2025.

(71) Applicant: TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, Nationality -India

(72) Inventors: (1) SARAVANAKUMAR KALIMUTHU of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (2) BHARANIRAM SENTHILKUMAR of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (3) KARTHIKEYAN KANNAN of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (4) BOOBALAN MANI of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (5) JAYAJOTHI JOHNSON VETHANAYAGAM of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India

(74) Agent : Md. Zahirul Islam, Advocate, Islam & Co., {app_representative_address}, Bangladesh

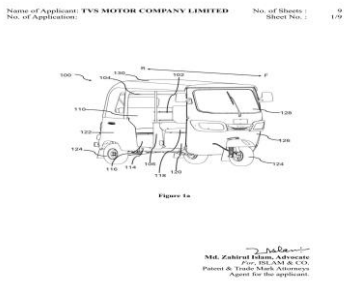
(51) INT. CL. : B62D 65/18

(54) Invention Title: AN EXHAUST ASSEMBLY FOR A MULTI-TRACK VEHICLE

(57) Abstract

ABSTRACT

The present subject matter relates to avehicle (100) comprising an internal combustion engine (202) disposed in a vehicle compartment (104); andan exhaust assembly (200) coupled to the internal combustion engine (202) and disposed in the vehicle compartment (104). The exhaust assembly (200) comprising:an exhaust pipe (206) coupled to an exhaust port (202a) of the internal combustion engine (202); anda muffler (204) coupled to the exhaust pipe (206). The exhaust assembly (200) comprises one or more conversion members (208) and one or more sensing members (216). At least one of the one or more conversion members (208) is configured in the muffler (204). At least one of the one or more sensing members (216) being configured in the muffler (204) and disposes downstream of the at least one of the one or more conversion members (208) configured in the muffler (204)at a pre-defined distance (d) from the at least one of the one or more conversion members (208) configured in the muffler (204).



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-349
(22) Filed: 17/11/2025

(23) Priority Data:
India, Number :202541025909, Date : 21-03-2025.

(71) Applicant: TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, Nationality -India

(72) Inventors: (1) GUTTI GNANAKOTAIAH of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (2) KUDUVA SHANTHULAL VISHNUKUMAR of c/o TVS MOTOR COMPANY LIMITED of Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (3) RAMALINGAM GOVINDHARAJ of c/o TVS MOTOR COMPANY LIMITED, Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India, (4) HARIPRASAD SOUNDARRAJAN of c/o TVS MOTOR COMPANY LIMITED, Chaitanya, No.12, Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006, India Nationality -India

(74) Agent : Md. Zahirul Islam, Advocate, Islam & Co., {app_representative_address}, Bangladesh

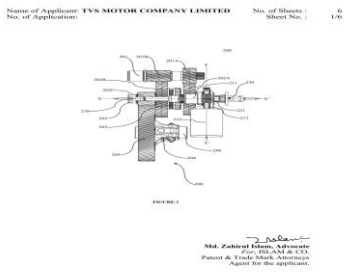
(51) INT. CL. : F16H 57/023

(54) Invention Title: A TRANSMISSION ASSEMBLY FOR A VEHICLE AND A LOCKING ASSEMBLY THEREOF

(57) Abstract

ABSTRACT

The present disclosure relates to a transmission assembly (200), a locking assembly (230) for a transmission assembly (200) and a vehicle (100).The transmission assembly (200) comprisesa driven shaft (202), a shift gear (213), a lock gear member (202M), and a locking assembly (230). The driven shaft (202) is configured to transmit a torque. The shift gear (213) comprises a plurality of cam profiles (C1, C2, C3). The lock gear member (202M) comprises a plurality of lugs (202L). The locking assembly (230) is configured to align with one of a plurality of cam profiles (C1, C2, C3) of the shift gear (213).The locking assembly (230) is configured to engage with the lock gear member (202M) *via* one of the plurality of lugs (202L) to restrict a transmission of the torque from the driven shaft (202).



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-350
(22) Filed: 17/11/2025

(23) Priority Data:
N/A

(71) Applicant: Daffodil International University of Daffodil Smart City, Birulia, Savar, Dhaka, 1216, Bangladesh

(72) Inventors: (1) Md. Reaz Mahmaud of Department of Nutrition and Food Engineering(NFE), Faculty of Health and Life Sciences(FHLS), Daffodil International University, Daffodil Smart City, Birulia, Savar, Dhaka, 1216, Bangladesh, (2) Sazzadur Rahman Sagor of Department of Nutrition and Food Engineering(NFE), Faculty of Health and Life Sciences(FHLS), Daffodil International University, Daffodil Smart City, Birulia, Savar,, Dhaka, 1216, Bangladesh, (3) Dr. Nizam Uddin of Department of Nutrition and Food Engineering(NFE),Faculty of Health and Life Sciences(FHLS), Daffodil International University, Daffodil Smart City, Birulia, Savar, Dhaka-1216, 1216, Bangladesh, (4) Humayra Kabir Sweety of Department of Nutrition and Food Engineering(NFE), Faculty of Health and Life Sciences(FHLS), Daffodil International University, Daffodil Smart City, Birulia, Savar, Dhaka, 1216, Bangladesh, (5) Dr. Md. Mahbubur Rahman of Department of Nutrition and Food Engineering(NFE), Faculty of Health and Life Sciences(FHLS), Daffodil International University, Daffodil Smart City, Birulia, Savar, Dhaka, 1216, Bangladesh, (6) Raian Rai of Department of Nutrition and Food Engineering(NFE), Faculty of Health and Life Sciences(FHLS), Daffodil International University, Daffodil Smart City, Birulia, Savar, Dhaka, 1216, Bangladesh, (7) Prof. Dr. Md. Bellal Hossain of Department of Nutrition and Food Engineering(NFE), Faculty of Health and Life Sciences(FHLS), Daffodil International University, Daffodil Smart City, Birulia, Savar, Dhaka, 1216, Bangladesh

(74) Agent : bd_daffodilinternationaluniversity9ba14, {app_representative_address}, Bangladesh

(51) INT. CL. : A21D 8/06

(54) Invention Title: Process for Preparing Prebiotic-Enriched Baked Goods from Jackfruit Seed Flour

(57) Abstract
This patent proposes a novel, sustainable process for producing prebiotic-enriched baked goods using jackfruit seed flour as a key functional ingredient. The invention leverages the natural resistant starch and oligosaccharide content of jackfruit seeds to deliver gut-health-enhancing, fiber-rich bakery products without compromising sensory appeal. Through optimized processing—comprising drying, milling, enzymatic treatment, and controlled baking—the prebiotic properties of jackfruit seed flour are retained. The developed baked goods demonstrate balanced nutrition (410 kcal, 9 g protein, 10 g fiber per 100 g), excellent sensory acceptability, and extended shelflife. This innovation contributes to the functional food industry, promotes agro-waste valorization, and supports the development of sustainable, health-promoting products with commercial and patent potential.

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-404
(22) Filed: 28/12/2025

(23) Priority Data:
China, Number :2024232531037, Date : 27-12-2024.

(71) Applicant: Xiamen Hongfa Electric Power Controls Co.,Ltd. of No.93, Yinong Road, Haicang District, Xiamen, Fujian Province, 361027, Nationality -China

(72) Inventors: (0) Xiamen Hongfa Electric Power Controls Co.,Ltd. of No.93, Yinong Road, Haicang District, Xiamen, Fujian Province, 361027, China Nationality -China

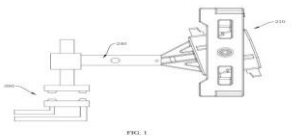
(74) Agent : A.B.M. Sohailud Doulah, Trademark Agent., {app_representative_address}, Bangladesh

(51) INT. CL. : F24H 15/292

(54) Invention Title: MOVING CONTACT UNIT, RELAY AND ELECTRIC METER

(57) Abstract

This application relates to a moving touch unit, a relay, and an electric meter. The moving contact unit includes: a plurality of moving springs arranged side by side; an adapter shaft connected to the plurality of moving springs; a connecting plate, wherein the connecting plate is fixedly attached to side walls of the plurality of moving springs, respectively, and a side wall of the moving spring connected to the connecting plate is located on a side of the moving spring in a radial direction of the adapter shaft. In this application, a plurality of moving springs are connected by using the connecting plate, and the connecting plate is prone to torsional deformation, so that when a moving contact or a stationary contact of the relay is ablated, a difference in swing angles is allowed between the moving springs, so as to meet a use requirement that each moving contact is connected to a corresponding stationary contact.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-405
(22) Filed: 28/12/2025

(23) Priority Data:
China, Number :2024232530922, Date : 27-12-2024.

(71) Applicant: Xiamen Hongfa Electric Power Controls Co.,Ltd. of No.93, Yinong Road, Haicang District, Xiamen, Fujian Province, 361027, Nationality -China

(72) Inventors: (0) Xiamen Hongfa Electric Power Controls Co.,Ltd. of No.93, Yinong Road, Haicang District, Xiamen, Fujian Province, 361027, China Nationality -China

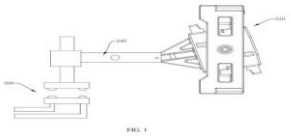
(74) Agent : A.B.M. Sohailud Doulah, Trademark Agent., {app_representative_address}, Bangladesh

(51) INT. CL. : F24H 15/292

(54) Invention Title: CONNECTION STRUCTURE, RELAY AND ELECTRIC METER

(57) Abstract

This application relates to a connection structure, a relay, and an electric meter. The connection structure includes: a hanging assembly connecting the pushing card and the moving contact unit and configured to allow the pushing card and the moving contact unit to rotate and move relatively within a preset range; and a compression spring located between the pushing card and the moving contact unit. In this application, the compression spring is used to press the moving contact unit in a closing process, and a pulling requirement of the moving contact unit in a disconnection process is met by the hanging assembly, thereby implementing integration of a push-close and pull-off function, effectively reducing difficulty in processing and assembling a connection position of the pushing card and the moving contact unit, and reducing production costs.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-406
(22) Filed: 28/12/2025

(23) Priority Data:
China, Number :2024232530956, Date : 27-12-2024.

(71) Applicant: Xiamen Hongfa Electric Power Controls Co.,Ltd. of No.93, Yinong Road, Haicang District, Xiamen, Fujian Province, 361027, Nationality -China

(72) Inventors: (0) Xiamen Hongfa Electric Power Controls Co.,Ltd. of No.93, Yinong Road, Haicang District, Xiamen, Fujian Province, 361027, China Nationality -China

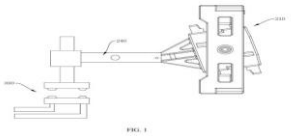
(74) Agent : A.B.M. Sohailud Doulah, Trademark Agent., {app_representative_address}, Bangladesh

(51) INT. CL. : F24H 15/292

(54) Invention Title: RELAY AND ELECTRIC METER

(57) Abstract

This application relates to a relay and an electric meter. The relay includes: a moving contact unit comprising a moving spring and a moving contact provided on a side of the moving spring; a stationary contact unit comprising a stationary contact opposite to the moving contact; and an arc extinguishing grid provided adjacent to the stationary contact and the moving contact. In this application, the arc extinguishing grid is provided adjacent to the stationary contact and the moving contact, when an arc is generated, the arc extinguishing grid can lead the arc to a grid, and quickly extinguish the arc by using a mechanism such as division and cooling, thereby significantly improving arc extinguishing performance of the relay, prolonging a service life of a component such as an electromagnetic system, and reducing safety hazards caused by the arc.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-407
(22) Filed: 28/12/2025

(23) Priority Data:
China, Number :2024119552106, Date : 27-12-2024.

(71) Applicant: Xiamen Hongfa Electric Power Controls Co.,Ltd. of No.93, Yinong Road, Haicang District, Xiamen, Fujian Province, 361027, Nationality -China

(72) Inventors: (0) Xiamen Hongfa Electric Power Controls Co.,Ltd. of No.93, Yinong Road, Haicang District, Xiamen, Fujian Province, 361027, China Nationality -China

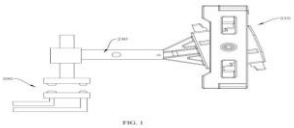
(74) Agent : A.B.M. Sohailud Doulah, Trademark Agent., {app_representative_address}, Bangladesh

(51) INT. CL. : F24H 15/292

(54) Invention Title: RELAY AND ELECTRIC METER

(57) Abstract

This application relates to a relay and an electric meter. The relay includes: a contact system comprising a moving contact unit and a stationary contact unit; a pushing system; a connection structure connecting the pushing system and the moving contact unit, wherein a connection position between the connection structure and the pushing system is located at one side of the moving contact unit away from the stationary contact unit. According to the present application, the pushing system is connected to the moving contact unit through the connection structure, and the connection position between the connection structure and the pushing system is located at a side of the moving contact unit away from the stationary contact unit. When the moving contact and the stationary contact are closed to generate electric arcs, the moving contact unit can block the electric arcs, prevent the pushing system from being ablated, and effectively improve the overall reliability and the service life of the relay.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-408
(22) Filed: 28/12/2025

(23) Priority Data:
China, Number :2024119552252, Date : 27-12-2024.

(71) Applicant: Xiamen Hongfa Electric Power Controls Co.,Ltd. of No.93, Yinong Road, Haicang District, Xiamen, Fujian Province, 361027, Nationality -China

(72) Inventors: (0) Xiamen Hongfa Electric Power Controls Co.,Ltd. of No.93, Yinong Road, Haicang District, Xiamen, Fujian Province, 361027, China Nationality -China

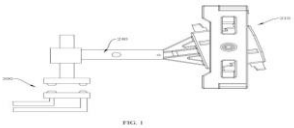
(74) Agent : A.B.M. Sohailud Doulah, Trademark Agent., {app_representative_address}, Bangladesh

(51) INT. CL. : F24H 15/292

(54) Invention Title: RELAY AND ELECTRIC METER

(57) Abstract

This application relates to a relay and an electric meter. The relay includes: a pushing system; a contact system comprising a stationary contact unit and a moving contact unit, wherein the stationary contact unit comprises a stationary magnetic conductor, the moving contact unit comprises a moving spring and a moving magnetic conductor, the moving magnetic conductor and the moving spring are separately formed and fixedly connected, the moving magnetic conductor and the stationary magnetic conductor are oppositely arranged, and the moving magnetic conductor is connected to the pushing system; wherein the moving magnetic conductor is adapted to move towards or move away from the stationary magnetic conductor under a driving of the pushing system, a first end of the moving spring is adapted to approach or be away from the stationary contact unit under a driving of the moving magnetic conductor, and a second end of the moving spring is fixed relative to the stationary contact unit. This application employs the moving and stationary magnetic conductors to achieve short-circuit resistance, which is different from conventional technologies that form short-circuit resistance structures by bending the spring body itself. This approach simplifies the manufacturing process and reduces material costs.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-409
(22) Filed: 28/12/2025

(23) Priority Data:
China, Number :2024119552163, Date : 27-12-2024.

(71) Applicant: Xiamen Hongfa Electric Power Controls Co.,Ltd. of No.93, Yinong Road, Haicang District, Xiamen, Fujian Province, 361027, Nationality -China

(72) Inventors: (0) Xiamen Hongfa Electric Power Controls Co.,Ltd. of No.93, Yinong Road, Haicang District, Xiamen, Fujian Province, 361027, China Nationality -China

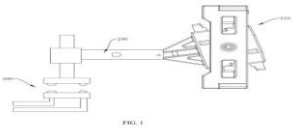
(74) Agent : A.B.M. Sohailud Doulah, Trademark Agent., {app_representative_address}, Bangladesh

(51) INT. CL. : F24H 15/292

(54) Invention Title: RELAY AND ELECTRIC METER

(57) Abstract

This application relates to a relay and an electric meter. The relay includes: an electromagnetic pushing system comprising a coil, and an axis direction of the coil being in a third direction; a contact system located on a third direction side of the electromagnetic pushing system, wherein the contact system comprises a moving contact unit and a stationary contact unit that are arranged in the third direction, the moving contact unit is connected to the electromagnetic pushing system, one end of the moving contact unit is fixed relative to the stationary contact unit, and the other end is configured to approach or be away from the stationary contact unit under a driving of the electromagnetic pushing system; and a terminal group located on a side of the contact system away from the electromagnetic pushing system and connected to the stationary contact unit and the moving contact unit. The relay according to the present application has a more reasonable space layout, more compact structure, which effectively reduces occupied space, can be better cooperated with other elements, and has good applicability.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2025-410
(22) Filed: 29/12/2025

(23) Priority Data:
N/A

(71) Applicant: Abdul Hannan of Village: Dhonsahadda; Union: Baligaon, Thana: Feni; District:, Feni, Nationality - Bangladesh

(72) Inventors: (0) Abdul Hannan of Village: Dhonsahadda; Union: Baligaon, Thana: Feni; District:, Feni, Bangladesh Nationality -Bangladesh

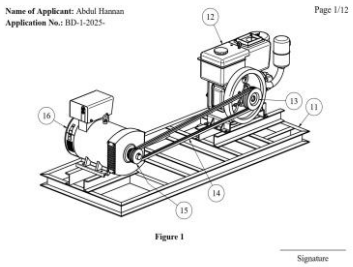
(74) Agent : Mohammad Hazrat Ali, {app_representative_address}, Bangladesh

(51) INT. CL. : F02D 41/00

(54) Invention Title: HIGH-EFFICIENCY FUEL-SAVING ELECTRIC POWER GENERATION SYSTEM AND METHOD

(57) Abstract

The invention relates to a high-efficiency electric power generation system in which mechanical power from a prime mover is transmitted to a generator through a belt-drive or gearbox transmission and operated according to an efficiency model that jointly optimizes torque, angular velocity (RPM), rotor linear speed, and magnetic-flux interaction time. The system adopts a functional relationship P = f(T, ω, FluxCutTime), where FluxCutTime represents the effective magnetic-flux cutting duration determined by rotor linear speed and rotor radius. By increasing magnetic-flux interaction time at higher angular velocities without requiring proportional torque increase, the invention reduces mechanical and magnetic losses and delivers higher electrical output for the same fuel input. The system is applicable to petrol, diesel, gas, and steam engines and is compatible with synchronous generators, alternators, and permanent-magnet generators, enabling improved efficiency and fuel-saving performance across generator configurations.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2026-3
(22) Filed: 07/01/2026

(23) Priority Data:
China, Number :2025200314089, Date : 07-01-2025.

(71) Applicant: Xiamen Hongfa Electric Power Controls Co., Ltd. of No.93, Yinong Road, Haicang District, Xiamen, Fujian Province, 361027, Nationality -China

(72) Inventors: (0) Xiamen Hongfa Electric Power Controls Co., Ltd. of No.93, Yinong Road, Haicang District, Xiamen, Fujian Province, 361027, China Nationality -China

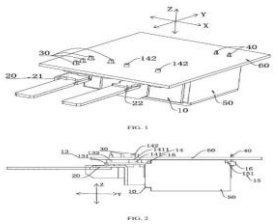
(74) Agent : A.B.M. Sohailud Doulah, Trademark Agent., {app_representative_address}, Bangladesh

(51) INT. CL. : F16D 48/06

(54) Invention Title: RELAY, ELECTRONIC CONTROL ASSEMBLY, AND ELECTRICITY METER

(57) Abstract

The present application relates to a relay, an electronic control assembly, and an electricity meter. The relay is configured to be connected to an electronic control board. The relay includes a relay body, load terminals, and one or more sampling pins. The load terminals and the sampling pins are both located externally on a first side of the relay body along a Y-axis direction. The sampling pins connect the load terminals (20) to the electronic control board (60) The relay body is provided with an isolation portion protruding from the first side along the Y-axis direction and located between the load terminals and the electronic control board. The isolation portion is located between the load terminals and the electronic control board. The isolation portion has one or more first through holes corresponding to the sampling pins.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2026-7
(22) Filed: 13/01/2026

(23) Priority Data:
China, Number :202510063803, Date : 15-01-2025.

(71) Applicant: Applicant Name Xiamen Hongfa Electric Power Controls Co., Ltd. Nationality CN of No.93, Yinong Road, Haicang District, Xiamen, Fujian Province, 361027, Nationality -China

(72) Inventors: (0) Applicant Name Xiamen Hongfa Electric Power Controls Co., Ltd. Nationality CN of No.93, Yinong Road, Haicang District, Xiamen, Fujian Province, 361027, China Nationality -China

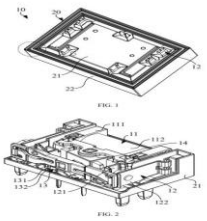
(74) Agent : A.B.M. Sohailud Doulah, Trademark Agent., {app_representative_address}, Bangladesh

(51) INT. CL. : H01H 50/02

(54) Invention Title: CASING ASSEMBLY AND RELAY

(57) Abstract

The present application relates to a casing assembly and a relay. The casing assembly includes a base and a cover disposed on and covering the base. A glue-dispensing groove is defined between the cover and the base. A first partition groove is defined in the base, and the first partition groove is located on an inner side of the glue-dispensing groove. By providing the first partition groove in the casing assembly, the portion of the base located on the outer side of the first partition groove undergoes flexible deformation to absorb the shrinkage-induced pulling force generated by the potting glue, thereby preventing the shrinkage-induced pulling force from being transmitted to the inner side of the first partition groove and causing deformation of the portion of the base located on the inner side of the first partition groove, which would affect the assemblage accuracy of the components on the base.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2026-9
(22) Filed: 13/01/2026

(23) Priority Data:
China, Number :2025100634560, Date : 15-01-2025.

(71) Applicant: Xiamen Hongfa Electric Power Controls Co., Ltd. of No.93, Yinong Road, Haicang District, Xiamen, Fujian Province, 361027, Nationality -China

(72) Inventors: (0) Xiamen Hongfa Electric Power Controls Co., Ltd. of No.93, Yinong Road, Haicang District, Xiamen, Fujian Province, 361027, China Nationality -China

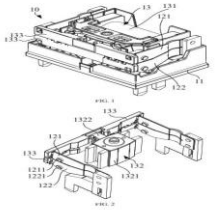
(74) Agent : A.B.M. Sohailud Doulah, Trademark Agent., {app_representative_address}, Bangladesh

(51) INT. CL. : H01H 50/54

(54) Invention Title: RELAY

(57) Abstract

The application relates to a relay, including: a base; a contact assembly including a first movable contact part, a second movable contact part, a first stationary contact part, and a second stationary contact part that are provided on the base. The first movable contact part is opposite to the first stationary contact part, the second movable contact part is opposite to the second stationary contact part, and at least a portion of the first stationary contact part is capable of flexible deformation; an electromagnetic system provided on the base and configured to drive the first movable contact part and the second movable contact part to move toward or away from the first stationary contact part and the second stationary contact part respectively. A travel distance for bringing the first movable contact part into contact with the first stationary contact part driven by the electromagnetic system is less than that for bringing the second movable contact part into contact with the second stationary contact part driven by the electromagnetic system.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2026-11
(22) Filed: 14/01/2026

(23) Priority Data:
China, Number :2025100637338, Date : 15-01-2025.

(71) Applicant: Xiamen Hongfa Electric Power Controls Co., Ltd. of No.93, Yinong Road, Haicang District, Xiamen, Fujian Province, 361027, Nationality -China

(72) Inventors: (0) Xiamen Hongfa Electric Power Controls Co., Ltd. of No.93, Yinong Road, Haicang District, Xiamen, Fujian Province, 361027, China Nationality -China

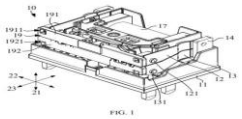
(74) Agent : A.B.M. Sohailud Doulah, Trademark Agent., {app_representative_address}, Bangladesh

(51) INT. CL. : H01R 43/24

(54) Invention Title: RELY

(57) Abstract

The present application provides a relay. The relay includes a contact assembly and an electromagnetic system. The contact assembly includes a first moving spring portion, a second moving spring portion, a first stationary spring portion and a second stationary spring portion. The first moving spring portion is opposite to the first stationary spring portion, and the second moving spring portion is opposite to the second stationary spring portion. During a process of the electromagnetic system driving the first moving spring portion and the second moving spring portion to move in the direction towards the first stationary spring portion and the second stationary spring portion, the first moving spring portion is in contact with the first stationary spring portion contact before the second stationary spring portion is in contact with the second moving spring portion, and during a process of the electromagnetic system driving the first moving spring portion and the second moving spring portion to move in the direction away from the first stationary spring portion and the second stationary spring portion, the second moving spring portion is separated from the second stationary spring portion before the first moving spring portion is separated from the first stationary spring portion. The aforementioned relay can reduce the initial contact resistance of the contact assembly and improve the stability of the contact resistance of the contact assembly during contact or separation.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2026-13
(22) Filed: 15/01/2026

(23) Priority Data:
N/A

(71) Applicant: Hossen Mohammad Masud, Senior Industrial Liaison Officer, of Dr. Qrdarat-I-Khuda Road, Dhaka-1205,, Nationality -Bangladesh

(72) Inventors: (1) 1. Md. Sagirul Islam of BCSIR, Dhanmondi, Dhaka-1205., Bangladesh Nationality -Bangladesh, (2) 2. Dr. Umme Sarmeen Akhtar of BCSIR, Dhanmondi, Dhaka-1205., Bangladesh Nationality -Bangladesh, (3) 3. Gorungo Ray of BCSIR, Dhanmondi, Dhaka-1205., Bangladesh Nationality -Bangladesh, (4) 4. Tanvir Ahmed of BCSIR, Dhanmondi, Dhaka-1205., Bangladesh Nationality -Bangladesh

(74) Agent : Masud bcsir, {app_representative_address}, Bangladesh

(51) INT. CL. : C04B 28/00

(54) Invention Title:

“Development of Solid Alkallne Activator for the preparation of Geopolymer Powder Cement”

(57) Abstract

The invention relates to a solid alkaline activator–based geopolymer powder cement and a method for its preparation. The geopolymer composition comprises reactive aluminosilicate materials including metakaolin and ground volcanic pumice, combined with a dry solid alkaline activator system consisting of dehydrated sodium silicate, sodium carbonate, sodium aluminate, potassium alum, and tartaric acid. The composition is formulated as a one-part dry powder requiring only the addition of water to initiate geopolymerization. Upon mixing with water, the composition forms a workable paste that hardens under ambient or mildly elevated curing conditions to produce a geopolymer binder. Optional mineral and nano-scale additives may be incorporated to modify microstructure and performance. The invention eliminates the use of liquid alkaline activators and provides a geopolymer cement suitable for construction and repair applications.

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2026-14
(22) Filed: 18/01/2026

(23) Priority Data:
N/A

(71) Applicant: Hossen Mohammad Masud of DR QUDRAT-I-KHUDA ROAD, DHANMONDI DHAKA-1205, DHAKA, Nationality -Bangladesh

(72) Inventors: (1) 1. Dr. Sahana Parveen of BCSIR, Dhanmondi, Dhaka-1205, Bangladesh Nationality -Bangladesh, (2) 2. Dr. Md. Rakibul Hasan of BCSIR, Dhanmondi, Dhaka-1205., Bangladesh Nationality -Bangladesh, (3) 3. Nourin Tarannum of BCSIR, Dhanmondi, Dhaka-1205., Bangladesh Nationality -Bangladesh, (4) 4. Nishat Tasnim of BCSIR, Dhanmondi, Dhaka-1205., Bangladesh Nationality -Bangladesh, (5) 5. Md. Nure Alam Siddiq of BCSIR, Dhanmondi, Dhaka-1205., Bangladesh Nationality -Bangladesh

(74) Agent : Masud bcsir, {app_representative_address}, Bangladesh

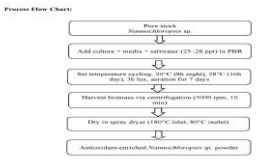
(51) INT. CL. : C12N 1/14

(54) Invention Title:

"Production of antioxidant-enriched *Nannochloropsis sp.* powder using temperature cycling."

(57) Abstract

The invention provides a method for producing an antioxidant-enriched *Nannochloropsis* sp. powder by applying controlled temperature cycling during microalgal cultivation. *Nannochloropsis* sp. is grown in a saline nutrient medium in a photobioreactor under continuous illumination and aeration, while the culture temperature is alternated between approximately 20 °C during night periods and 28 °C during day periods. This temperature stress stimulates carotenoid biosynthesis, leading to increased accumulation of beta-carotene and violaxanthin compared with conventional constant-temperature cultivation. The harvested biomass is concentrated and spray-dried to obtain a stable, fine microalgal powder enriched with antioxidants, omega-3 fatty acids, proteins, vitamins, and minerals. The resulting product is suitable for use as a nutraceutical or functional food ingredient for supporting eye health, cardiovascular function, and anti-inflammatory activity. The process utilizes existing photobioreactor and drying systems, enabling cost-effective and scalable commercial production.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2026-15
(22) Filed: 18/01/2026

(23) Priority Data:
N/A

(71) Applicant: Hossen Mohammad Masud of DR QUDRAT-I-KHUDA ROAD, DHANMONDI DHAKA-1205, DHAKA, Nationality -Bangladesh

(72) Inventors: (1) DR. MD. AMINUR RAHMAN of BCSIR, Dhanmondi, Dhaka-1205, Bangladesh Nationality -Bangladesh, (2) MD. GOLAM MOSTAFA of BCSIR, Dhanmondi, Dhaka-1205., Bangladesh Nationality -Bangladesh, (3) HAYATULLAH of BCSIR, Dhanmondi, Dhaka-1205., Bangladesh Nationality -Bangladesh, (4) MD. NAKIB HOSSEN of , Bangladesh Nationality -Bangladesh

(74) Agent : Masud bcsir, {app_representative_address}, Bangladesh

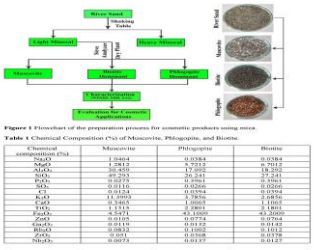
(51) INT. CL. : A45D 40/24

(54) Invention Title:

"**Production of Mica Powder from Brahmaputra River Sand, Bangladesh: A Comprehensive Assessment for Cosmetic Applications**."

(57) Abstract

We report the separation of mica mineral from arc Brahmaputra River sand of Bangladesh. About 90% of whole Mica content of river sand will be recoverable which reduce the production cost of mica as well as waste management cost. A new thought based on mica mineral recovery from River sand will be developed in our country. The processed mineral will be used by local industry of Bangladesh and as well as to export to other countries. Therefore, employment opportunity will be created in our country as well as savings and earning foreign currencies. This study also investigates Health risk assessment like the skin irritation potential, antimicrobial activity, and heavy metal content of mica collected from Brahmaputra River sand, with an emphasis on their suitability for cosmetic applications.



Keywords: Mica, Skin irritation, Heavy metals, Health risk assessment, Cosmetics

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2026-22
(22) Filed: 19/01/2026

(23) Priority Data:
N/A

(71) Applicant: HawkEyes Digital Monitoring Limited of 2nd Floor, House 05, Road 12, Sector 1, Uttara, Dhaka-1230, Nationality -Bangladesh

(72) Inventors: (1) Mirza Ferdous Ohid of HawkEyes Digital Monitoring Limited, 2nd Floor, House 05, Road 12, Sector 1, Uttara, Dhaka-1230, Bangladesh Nationality -Bangladesh

(74) Agent : Masum Rahman (Advocate) Advanced IP Law Firm, {app_representative_address}, Bangladesh

(51) INT. CL. : G10L 21/0364

(54) Invention Title: An AI-Based System and Method for Real-Time Evaluation of Trade Marketing and Merchandising Execution with Field Force Governance and Automated Market Insight Analysis.

(57) Abstract

The present invention relates to a computer-implemented, artificial intelligence (AI)–based system and method for validating trade merchandising execution at retail outlets using AI-driven image analysis, biometric authentication, and geo-location verification. The system comprises a central server having at least one processor and memory, a mobile computing device equipped with a camera and GPS module, and an AI-based image-analysis module executed by the central server.

In operation, attendance of a field merchandiser is authenticated by capturing a facial image through the mobile computing device and verifying identity and liveness at the server using an AI-based facial recognition and liveness detection model. Physical presence at a designated retail outlet is validated by comparing GPS coordinates captured during execution with stored outlet location data. The merchandiser captures one or more images of installed merchandising or display materials at the outlet using the mobile device.

The captured images are transmitted to the server and analyzed by the AI-based image-analysis module employing trained machine-learning models to automatically detect presence, quantity, placement, and compliance of merchandising materials with predefined execution parameters. The system generates real-time, AI-validated execution results and stores validated execution data and images in a centralized database for audit, monitoring, governance, and performance evaluation.

The invention enables immediate identification of non-compliant execution through AI-assisted decision outputs, reduces material leakage, and improves execution accuracy in both structured and unstructured retail environments. By integrating AI-based biometric authentication, geo-location verification, and automated image-based execution analysis within a single platform, the invention provides a reliable, scalable, and technically robust solution for validating field-level merchandising activities.

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2026-32
(22) Filed: 26/01/2026

(23) Priority Data:
N/A

(71) Applicant: Md. Razu Bisshas of Kuturia, Ashulia, Dhaka, Savar, Nationality -Bangladesh

(72) Inventors: (0) Md. Razu Bisshas of Kuturia, Ashulia, Dhaka, Savar, Bangladesh Nationality -Bangladesh

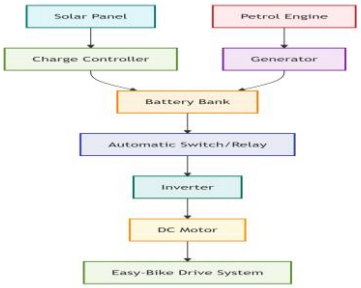
(74) Agent : Md. Razu Bisshas, {app_representative_address}, Bangladesh

(51) INT. CL. : B60L 53/51

(54) Invention Title: Hybrid Solar-Petrol Backup Charging System for Electric Vehicles (Easy-Bike)

(57) Abstract

A hybrid charging system for electric easy-bikes uses solar energy as primary source and a petrol engine as backup. An automatic switch detects low battery and starts the petrol generator, ensuring uninterrupted power. The system is economical, reliable, and suitable for regions with irregular sunlight.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2026-38
(22) Filed: 01/02/2026

(23) Priority Data:
N/A

(71) Applicant: Reaz Ahmed Khan of 260/B, Evergreen Plaza (6th Floor), Dhaka, Tejgaon Industrial Area,, 1208, Bangladesh

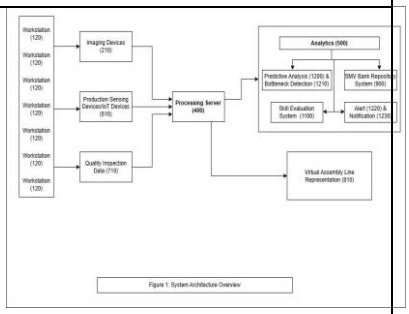
(72) Inventors: (1) Md Rashed Mahmud of Holding-364, Road- Adarsha Nagar 11/5, MIddla Badda Mollapara, PO-Gulshan Model Town,, Dhaka, 1212, Bangladesh

(74) Agent : Md Rashed, {app_representative_address}, Bangladesh

(51) INT. CL. : G05B 19/418

(54) Invention Title: A Computer-Implemented System for Real-Time Automated Time Study and Motion Analysis in Readymade Garment Manufacturing Assembly Lines.

(57) Abstract
A computer-implemented system and method for automated industrial engineering analysis in garment manufacturing assembly lines is disclosed. The system employs multiple imaging devices mounted above an assembly line and oriented substantially perpendicular to a working surface to capture visual data relating to operator motion, machine operation, and material handling. Visual data from the imaging devices are synchronized and fused to generate a unified representation of assembly line activities. Artificial intelligence-based analysis is applied to continuously determine observed cycle times, active motion time, and idle time for individual workstations. A virtual representation (digital twin) of the assembly line is generated to map processes, machines, and operators and to associate observed performance data with factory-specific standard time values. The system integrates production sensing and quality inspection data to generate multi-layer efficiency metrics, predict bottlenecks, and issue real-time alerts for corrective intervention. Continuous observation across production cycles enables statistically robust performance measurement, objective operator evaluation, and improved utilization of existing manufacturing capacity without requiring additional physical infrastructure.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2026-40
(22) Filed: 03/02/2026

(23) Priority Data:
N/A

(71) Applicant: Walton Hi-Tech Industries PLC. of Plot No-1088,Block-i,Road-Sabrina Sobhan 5th Avenue, Bashundhara, Dhaka, Vatara, Nationality -Bangladesh, S M Mahbubul Alam of Plot No-1088,Block-i,Road-Sabrina Sobhan 5th Avenue, Bashundhara, Vatara, Nationality -Bangladesh

(72) Inventors: (2) Pritom Mojumder of WALTON, Chandra, Kaliakoir, Gazipur., Bangladesh Nationality -Bangladesh, (3) Mohammed Al Fahad of WALTON, Chandra, Kaliakoir, Gazipur, Bangladesh Nationality -Bangladesh, (4) Md. Faridul Islam of WALTON, Chandra, Kaliakoir, Gazipur., Bangladesh Nationality -Bangladesh

(74) Agent : Syed, {app_representative_address}, Bangladesh

(51) INT. CL. : F25B 29/00

(54) Invention Title: A Smartphone Camera–Based Visible Light Communication System for Reading Operational Information and Uptime in Refrigerators.

(57) Abstract

A method and system are disclosed for retrieving operational information and uptime from a refrigerator product using visual light communication. The refrigerator product includes at least one light-emitting element that can be configured to emit a modulated light signal encoding operational and uptime information generated by an internal controller. A smartphone equipped with a camera captures the emitted light signal, and a mobile application enables the smartphone to decode the signal without requiring physical connectors or RF-based wireless communication. The system operates using existing lights in the product, which is already connected to a control system. This innovation allows for the collection of diagnostic information in a cost-effective way under normal operating conditions.

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2026-42
(22) Filed: 03/02/2026

(23) Priority Data:
Japan, Number :2025020563, Date : 12-02-2025.

(71) Applicant: JFE STEEL CORPORATION of 2-3, Uchisaiwai-cho 2-chome, Chiyoda-ku, Tokyo 100-0011 Japan, Nationality -Japan

(72) Inventors: (1) Yuto OHBA of Intellectual Property Dept., JFE STEEL CORPORATION 2-3, Uchisaiwai-cho 2-chome, Chiyoda-ku, Tokyo 100- 0011, Japan Nationality -Japan

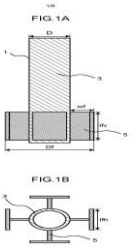
(74) Agent : Remfry & Son, {app_representative_address}, Bangladesh

(51) INT. CL. : E02D 5/48

(54) Invention Title: PILE, PILE CONSTRUCTION METHOD, STRUCTURE, CONSTRUCTION METHOD FOR STRUCTURE, PILE DESIGN METHOD, AND PILE MANUFACTURING METHOD

(57) Abstract

To obtain high push-in bearing capacity and high pull-out bearing capacity that are applicable to a driven pile method and a press-in method, that do not require the large-scale machine for construction, and that are improved in constructability, economic efficiency, and environmental aspect. A pile 1 includes a pile body 3 and three or more fins 5 of T-shape arranged on an outer peripheral surface of the pile body 3, and each of the fins 5 has a vertical length of 0.5 times or more an outer diameter of the pile body 3. Furthermore, the fin 5 has a T-shaped or L-shaped cross-section orthogonal to a longitudinal direction of the pile body 3, and the fin 5 is arranged to have a horizontal plate constituting the T-shape or the L-shape in an end region of the fin 5 protruding outward from the pile body, in the cross-section of the fin 5.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2026-51
(22) Filed: 16/02/2026

(23) Priority Data:
N/A

(71) Applicant: Walton Hi-Tech Industries PLC. of Plot No-1088,Block-i,Road-Sabrina Sobhan 5th Avenue, Bashundhara, Dhaka, Vatara, Nationality -Bangladesh

(72) Inventors: (1) Mohammed Al Fahad of WALTON, Chandra, Kaliakoir, Gazipur, Bangladesh Nationality -Bangladesh, (2) Pritom Mojumder of WALTON, Chandra, Kaliakoir, Gazipur, Bangladesh Nationality -Bangladesh, (3) Sifat Ul Alam of WALTON, Chandra, Kaliakoir, Gazipur, Bangladesh Nationality -Bangladesh, (4) Shah Md. Sakif Uddowla of WALTON, Chandra, Kaliakoir, Gazipur, Bangladesh Nationality -Bangladesh

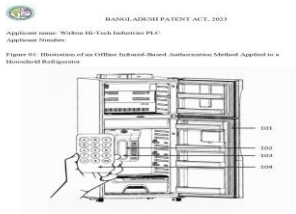
(74) Agent : Syed, {app_representative_address}, Bangladesh

(51) INT. CL. : B65B 3/26

(54) Invention Title: An Infrared-Based Authorization and Control Method for Offline Household Appliances.

(57) Abstract

An infrared-based authorization and control method for offline household appliances is disclosed. The method comprises receiving an authorization code via infrared communication, decoding and validating the authorization code using embedded firmware executed within the appliance, and enabling appliance operation for a predefined operational duration upon successful validation. When the operational duration expires, at least one essential functional subsystem of the appliance is disabled to place the appliance into a locked state. The authorization state is stored in non-volatile memory such that the locked state persists across power interruptions, unplugging, or reset attempts. The method operates entirely offline and re-enables the appliance only upon receipt of a valid infrared-encoded authorization code.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 31 & Date: 9 March 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2026-63
(22) Filed: 25/02/2026

(23) Priority Data:
N/A

(71) Applicant: Walton Hi-Tech Industries PLC. of Plot No-1088,Block-i,Road-Sabrina Sobhan 5th Avenue, Bashundhara, Dhaka, Vatara, Nationality -Bangladesh

(72) Inventors: (1) Mithun Chakraborty of WALTON, Chandra, Kaliakoir, Gazipur., Bangladesh Nationality -Bangladesh, (2) Sheikh Toukirul Alam of WALTON, Chandra, Kaliakoir, Gazipur., Bangladesh Nationality -Bangladesh, (3) Ibrahim Tinku of WALTON, Chandra, Kaliakoir, Gazipur., Bangladesh Nationality -Bangladesh

(74) Agent : Syed, {app_representative_address}, Bangladesh

(51) INT. CL. : E05B 39/00

(54) Invention Title: Digital Device Protection for EMI Compliance in Smart TV – guarantees secure installment collection with automated device locking to ensure timely payments.

(57) Abstract

An EMI Compliance software solution for televisions designed to secure installment-based purchases through automated, tamper-resistant enforcement mechanisms for the users to pay on due time. The system integrates into television firmware and utilizes an encrypted data structure for persistent operational data stored in protected partitions that survive factory resets. The solution operates in hybrid connectivity mode, synchronizing with servers when online and tracking usage locally when offline. Key features include barcode-based registration, payment method validation, enforcement actions on due time, non-by passable lock screens, automated error correction, and comprehensive business intelligence integration. The invention provides reliable payment security across variable conditions while maintaining user accessibility and operational efficiency for retailers.